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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/595,626

05/01/2006

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EXAMINER

SASINOWSKI, ANDREW

ART UNIT

PAPER NUMBER

2627

MAIL DATE

DELIVERY MODE

03/25/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/595,626	Applicant(s) NAKAMURA, TADASHI	
	Examiner ANDREW J. SASINOWSKI	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Yoshida et. al. [2005/0083814].

Yoshida teaches:

- A drive apparatus for performing a sequential recording for a write-once recording medium **[abstract]** the drive apparatus comprising:
- a recording/reproduction section for performing a recording operation or a reproduction operation for the write-once recording medium **[\$0028, figures 6-7]**;
- a drive control section for controlling the recording/reproduction section **[\$0028, figures 6-7]**;
- and a memory circuit for storing data to be recorded **[206]**,
- wherein the drive control section performs a process including: receiving a recording instruction specifying at least data to be recorded **[\$0082]**;
- storing the data to be recorded in the memory circuit **[\$0077]**;

- defining data from a start location of the data stored in the memory circuit to a location corresponding to a next writable address as a first data portion **[\$0080, note the spare area]**;
- defining data from the location corresponding to the next writable address to an end location of the data stored in the memory circuit as a second data portion **[\$0080, normal recording area of disc]**;
- and controlling the recording/reproduction section to record the second data portion before recording the first data portion **[\$0080]**

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida in view of Park et. al. [2004/0076049]

Regarding claim 2, Yoshida teaches:

- A drive apparatus for performing a sequential recording for a write-once recording medium, wherein the write-once recording medium includes a spare area and a user data area **[abstract]**, the drive apparatus comprising:

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- a recording/reproduction section for performing a recording operation or a reproduction operation for the write-once recording medium **[\$0028]**;
- and a drive control section for controlling the recording/reproduction section **[figs. 6-7]**,
- wherein the drive control section performs a process including: receiving a recording instruction specifying at least a location at which data is to be recorded **[\$0082]**;
- controlling the recording/reproduction section to record the data at the determined recording location **[\$0080]**.

Yoshida does not teach:

- determining whether or not an ECC cluster including the location specified by the recording instruction is replaced by a replacement cluster;
- determining whether or not a read-modify-write process is required;
- when it is determined that the ECC cluster including the location specified by the recording instruction is replaced by a replacement cluster and the read-modify-write process is required, determining a specific location in the user data area which is close to the recording location of the replacement cluster as a recording location at which the data is to be recorded;

Park teaches:

- determining whether or not an ECC cluster including the location specified by the recording instruction is replaced by a replacement cluster **[fig. 5, replaced cluster #2 from Rec(S12), also note §0041];**
- determining whether or not a read-modify-write process is required **[§0043, note the updated management information]**
- when it is determined that the ECC cluster including the location specified by the recording instruction is replaced by a replacement cluster and the read-modify-write process is required, determining a specific location in the user data area **[fig. 5, DFL 32, note that it is in the ‘user data area’ (Data area indicated at top of figure)]** which is close to the recording location of the replacement cluster as a recording location at which the data is to be recorded **[fig. 5, items ‘Custer #2’ and DFL#1, note that ‘close’ is a relative term];**

It would have been obvious to one with ordinary skill in the art at the time of invention to combine the apparatus taught by Yoshida with the ECC cluster functionality taught by Park because doing so would enable effective management of defective areas on BD-WO formatted discs. **[Park, §0010]**

Response to Arguments

Applicant's arguments filed 2/3/2010 have been fully considered but they are not persuasive.

Regarding claim 1, applicant argues that Yoshida does not teach that the first and second data portions are stored on a memory circuit. Applicant further argues that the word “before” in claim 1 corresponds to a “temporal” basis, as opposed to a “spatial” basis. Finally, applicant argues that it is unclear how data is recorded onto the spare area. Examiner respectfully disagrees with the applicant on all counts.

First, the first and second data portions are in fact stored onto the 'memory circuit' (fig. 7, item 206, 'buffer'). Note that all data that is to be recorded is stored into the buffer (§0077). Furthermore, there must be an internal data partitioning within the buffer system or else all of the data would be recorded onto the disc at random. Therefore the first and second data portions are defined as being stored in the buffer and they correspond to an area on the optical medium.

Furthermore, there is nothing in claim 1 that prevents the claim element “...record the second data portion before recording the first data portion...” from being read on a spatial basis, as opposed to a temporal basis. If applicant wishes that the word ‘before’ is only read on a temporal basis, claim amendments will be required.

Finally, Yoshida does teach that the spare area of the disc is recorded upon during the recording process. As shown in fig. 5a – 5d, the initial spare area 110a is later recorded upon (fig. 5b, 112b). From a technical perspective, the spare area is recorded upon using the same method and process that the user data is recorded, as found in §0070 - §0079.

Regarding claim 2, applicant argues that Park does not teach the ‘determining step’ element. Applicant also argues that Park does not teach the specific order of steps as taught in the “drive control section” claim element. Examiner respectfully disagrees.

Park does teach the ‘determining step’ element as found in claim 2., as noted in the citations in the above rejection. Claim 2 of Park also teaches the determining step (“...determining whether the corresponding cluster area is defective based on the examination result).

Furthermore, applicant is reminded that claim 2 teaches an apparatus, not a process or a method. As noted in MPEP 2113, apparatus claims "...cover what a device *is*, not what it *does*." (Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original)). Therefore, it is irrelevant as to whether Park teaches the exact same order of step presented in the process of claim 2, because Park does teach the physical “drive control section” as taught in the apparatus of claim 2.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW J. SASINOWSKI whose telephone number is (571)270-5883. The examiner can normally be reached on Monday to Friday, 7:30 to 5:00, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on (571)272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ANDREW J SASINOWSKI/
Examiner, Art Unit 2627

/HOA T NGUYEN/
Supervisory Patent Examiner, Art
Unit 2627

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